

**CLAIMS**

1. A method for analyzing an object comprising:  
prescanning the object using a multiple energy X-ray device to determine  
5 information indicative of effective atomic number characteristics of the object; and  
conducting scans of areas of interest of the object with a computed tomography  
device based upon the information.
2. The method of claim 1 further comprising transmitting the information to a  
10 processor coupled to the computed tomography device.
3. The method of claim 2, further comprising:  
performing a metal artifact correction based on the information.
- 15 4. The method of claim 3, wherein performing a metal artifact correction  
includes performing a beam hardening correction.
5. The method of claim 3, wherein performing a metal artifact correction  
includes performing a scatter correction.  
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6. The method of claim 1, further comprising:  
using the information to determine density characteristics of the object.
7. The method of claim 1, further comprising:  
25 using the information to determine a plane of the object to be scanned.
8. A method for analyzing an object comprising:  
prescanning the item using a multiple energy X-ray device to determine prescan  
information;  
30 transmitting the prescan information to a processor coupled to a computed  
tomography device;

performing a computed tomography scan of a plane of the object based on the prescan information; and

performing a metal artifact correction on the computed tomography scan based on the prescan information if the plane intersects an area including or near a metal object.

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9. The method of claim 8, wherein the processor is located within the computed tomography device.

10. An apparatus for analyzing an object comprising:  
10 a multiple energy prescanner that prescans the object; and  
a computed tomography device that scans only areas of interest of the object based on information determined in the prescan .

11. The apparatus of claim 10, wherein the multiple energy prescanner has a  
15 high energy X-ray source and a low energy X-ray source.

12. The apparatus of claim 10, further comprising a conveyor for transporting the item from the multiple energy prescanner to the computed tomography device.

13. The apparatus of claim 10, wherein the computed tomography device is a  
20 multiple energy computed tomography device.

14. An apparatus for analyzing an object comprising:  
a multiple energy prescanner; and  
25 a computed tomography device;  
wherein information indicative of at least one metal artifact is transmitted from the multiple energy prescanner to the computed tomography device.